OPINION 93

Twelve Generic Names of Fishes Placed in the Official List, by Suspension of the Rules

SUMMARY.—The following 12 generic names of fishes are herewith placed in the Official List of Generic Names, under the Plenary Power for Suspension of the Rules: *Conger* Cuv., 1817 (*Muraena conger* L.); *Coregonus* Linn., 1758 (*Salmo lavaretus* L.); *Elcotris* Bloch & Schneider, 1801 (*gyrinus* Cuv. & Val.); *Epinephelus* Bloch, 1792 (*marginalis* Bloch); *Gymnothorax* Bloch, 1795 (*reticularis* Bloch); *Malapterurus* Lacépède, 1803 (*Silurus electricus* L.); *Mustelus* Linck, 1790 (*Squalus mustelus* L. [=*Mustelus laevis*]); *Polynemus* Linn., 1758 (*paradisaeus* L.); *Sciaena* Linn., 1758 (*umbra* L.= *Cheilodipterus aquila* Lacép. as restr. by Cuvier, 1815); *Serranus* Cuv. (*Perca cabrilla* L.); *Stolephorus* Lacép., 1803 (*commersonianus* Lacép.); *Teuthis* Linn., 1766 (*javus* L.).

Names now current are not to be discarded unless the reasons for change show a clear-cut necessity.

STATEMENT AND DISCUSSION OF CASE.—The following cases are submitted and discussed by Commissioner David Starr Jordan. The U. S. Bureau of Fisheries (signature H. F. Moore, Acting Commissioner) concurs in the recommendations regarding them.

It seems to me that a legitimate use of the plenary power will be to cast it on the side of names now current unless the reason for change is a clear-cut necessity, priority of actual date for example. But in cases where a reasonable argument on both sides exists, it seems better to give current nomenclature the preference.

The earlier writers had no conception of genotype, regarding a genus merely as a convenient pigeon-hole in which to stow species, to be more or less arbitrarily divided when the receptacle became too full or its contents too obviously incongruous. In applying the rule of the first reviser, we find many difficulties as every taxonomist knows. Often a name has been dislocated by application to a species unknown to the original author. Often a wiser or more characteristic choice could have been made; still more often a writer mentions a given species not as a type, but rather as an illustration. And it is a rare case where a designated type among the early authors can be "rigidly construed" as indicated in accepted rules.

I now ask the Commission to consider stabilizing current nomenclature in a number of genera of fishes, in which the pertinence of current nomenclature has been questioned, for reasons more or less plausible, but in no case beyond question.

I propose that, subject to possible new information, the following current generic names be provisionally legalized with the type species indicated, notwithstanding certain contrary arguments of greater or less validity, but in no case clear-cut and conclusive.

AETOBATUS Blainville, 1816: type *Raja narinari* Euphrasen.

The name *Aëtobatus* was applied by Blainville to the Eagle Rays, of which *Raja aquila* L. = *Aëtobatus vulgaris* Blainville would be the natural type. But as the genus *Myliobatis* (Duméril) Cuvier, 1817, had been established also for the Eagle Rays, the first reviser, Müller & Henle adopted both names, assigning *R. aquila* to *Myliobatis* and an unwonted type, *R. narinari* to *Aëtobatus*. From this arrangement Cantor (1849) dissented making *Myliobatis* a synonym of *Aëtobatus* and giving a new name, *Stoasodon* to *R. narinari*. It will create less confusion, however, to let the first revision stand, accepting *R. narinari* as type of *Aëtobatus*.

CONGER Cuvier, 1817: type *Muraena conger* L.

The name *Leptocephalus* was given by Gronow, a non-binomial author, in 1763 to a translucent ribbon-like larva, now shown to be that of the Conger Eel. In binomial nomenclature, this name dates from its adoption by Scopoli in 1777. The name *Conger*, used by Houttuyn in 1764, is said not to be available, although noted as such in Jordan, Genera of Fishes, p. 22.

As *Leptocephalus* and its derivatives have been in use for more than a century as the designation of these peculiar larvae I recommend that this use be continued and that the generic name of the Conger eels be established as *Conger*, in accordance with current usage.

[Apstein, 1915a, 187: *Conger* Cuv., 1817, type *vulgaris* Richards, 1844.]

COREGONUS Linnaeus, 1758: type *Salmo lavaretus* L.

The generic name *Coregonus*, taken from Artedi, is given by Linnaeus in the plural form only as *Coregoni*. The sub-generic names *Truttae* (*Salmo trutta*), *Osmerus* (*Salmo eperlanus*) and *Characinus* (*Salmo gibbosus*) appear in the same fashion as plurals. To reject these names in almost universal use, to substitute some possible later synonym would be a source of needless confusion. I recommend that these plural nouns be maintained as valid.

[Apstein, 1915a, 187: *Coregonus* Cuv., 1817, type *wartmanni* Bl., 1784.]

ELEOTRIS Bloch and Schneider, 1801: type *Eleotris gyrinus* Cuv. & Val.

The generic name *Eleotris* first appears in Gronow, Zoophylaceum p. 183, 1763, with a good description and three species polynomially named, the name *Eleotris* being especially associated with a Chinese species, *Gobius eleotris* L., *Gobius chinensis* Osbeck. The other, apparently a true "*Eleotris*" was named *Gobius pisonis* by Gmelin (1789), and *Gobius amorca* by Walbaum (1792).

The first binomial author to revive the name *Eleotris* is Schneider in his edition of Bloch. The genus is here nominally equivalent to *Gobius*, the ventral fins being described as "connexae," a statement true of some of the species named but not of the *Eleotris* of Gronow. No species belonging to the genus *Eleotris* as now understood is included, though reference is made to *Eleotris pisonis* as a "species non definienda."

Meanwhile the *Amore Pixuma* of Maregrave's pre-Linnaean Historia Naturalis Brasiliae edited by Dr. Wilhelm Piso is brought into the synonymy. This is a crude figure of some small goby with two dorsal fins, perhaps an *Elcotris*, but not the actual type of any specific name.

In 1800, Lacépède established a genus *Gobiomoroides* on a dried fish "sent by Holland to France," which he identified as *Gobius pisonis*, naming it *Gobiomoroides piso*. It could, however, not be either *Elcotris pisonis* or "*Amore pixuma*" as it had a single dorsal of 45 rays and canine teeth. It was probably not a goby, and the name cannot be used for *Elcotris*.

Elcotris next appears with Cuvier (Règne Animal 1, 257, 1817) who accepts the name from Gronow, and gives a correct definition. His types are specimens from Levaillant taken in Surinam. The species described by Cuvier and Valenciennes as *Elcotris gyrinus* later authors have generally regarded as the type of *Elcotris*. It is identified by Jordan & Evermann with *Gobius pisonis* Gmelin.

We have apparently two alternatives in case Gronow's names, "binary" but not binomial, are not accepted.

(1) We may use the name *Elcotris* as dating from Schneider, taking *Gobius pisonis* Gmelin, waiving the fact that this is a "species non definienda" in Schneider's conception—thus stabilizing current nomenclature.

(2) We may apply the name *Elcotris* to some one of the species enumerated by Schneider, thus arbitrarily displacing one of the following well-established names: *Valenciennea*, *Nomeus*, *Apocryptes*, *Hypseleotris*, *Bolcophthalmus* or *Pomatomus*, genera of later date included in the incoherent mass.

Convenience as well as justice is served by adopting the first alternative, using the name *Elcotris* in the sense of Gronow and Cuvier with *Gobius pisonis* as the type.

The name *Gobiomoroides* has no place in this connection, and its type is as yet unidentified.

Epinephelus Bloch, 1792: type *Epinephelus marginalis* Bloch.

The genus *Epinephelus* was based on *E. afer*, *E. marginalis*, *E. merra*, and *E. ruber*: *marginalis* and *merra* are congeneric, and belong to the great group called *Epinephelus* by Gill, Bleeker, and nearly all recent authors. Of these, *marginalis* is typical. The species named first, *afer*, has been on that account chosen as type by Fowler. This species was separated as the type of *Alphestes* by Bloch & Schneider, 1801; *ruber* was named as type by Jordan & Gilbert, in 1882, who supposed it to be congeneric with *marginalis* and this species under another name (*acutirostris* Cuv. & Val.) became the type of *Parepinephelus* Bleeker, 1875. Justice and convenience are best served by retaining the name *Epinephelus* for its chief components, typified by *E. marginalis*, as understood by nearly all authors. Otherwise the genus would stand as *Cerna* Bonaparte, 1837, unless, with Fowler, we recognize *Epinephelus gigas* (*Perca gigas*) L. as the type of *Serranus* Cuvier, 1817, a change I think unnecessary.

Gymnothorax Bloch, 1795: type *Gymnothorax reticularis* Bloch.

As originally given, *Gymnothorax* was simply a substitute name for *Muraena* L. Later, in dividing this extensive genus, Bleeker and after him Günther used the name *Gymnothorax* for one of its great divisions, and this arrangement has been largely followed. The first fixation of type may be held to separate *Gymnothorax* from *Muraena*, and I think that the use of the former name

should be preferred to the later *Lycodontis* McClelland based on one of the species of *Gymnothorax*. The case for the use of *Gymnothorax* is stated in Jordan, Genera of Fishes p. 168, that for its suppression on p. 53.

LAMPETRA Gray, 1851: type *Petromyzon fluviatilis* L.

The type of *Ammocoetus* Duméril, 1806, *Petromyzon planeri*, is a larval lamprey of uncertain genus, and the name may be preferably used (as *Ammocoetes*) as the designation for larval lampreys; while *Lampetra*, the earliest name based on *Petromyzon fluviatilis* L. may be retained.

MALAPTERURUS Lacépède, 1803: type *Silurus electricus* L.

In 1775, Forskål discovered the Electric Catfish of the Nile (*Silurus electricus* L.), which he confused with the Electric Ray (*Raja torpedo* L.) and which seemed to him to justify generic separation from *Raja*. He questions whether it might be allied to *Mormyrus* or whether it might find a place among the torpedoes of Rondelet, or might it be type of a new genus. "Aut potius novum constituere genus. Certe determinatur torpedinis *Character Genericus*: Piscis branchiostegus: apertura lineari, obliqua supra pinnae pectorales; corpore nudo; pinnis ventralibus seu abdominalibus; dentibus numerossissimis densis, subulatis." This statement leaves no question as to the species in mind.

In view of the confusion in Forskål's account, and the uncertain fashion in which he describes the supposititious new genus, I suggest that the current use of *Torpedo* for the Electric Ray and *Malapterurus* for the Electric Catfish be approved.

[Apstein 1915a, 188: *Malapterurus* Lacép., 1803, type *electricus* Gmel., 1788.]

MUSTELUS Linck, 1790: type *Squalus mustelus* L. (=*Mustelus laevis*).

The generic name *Mustelus* has been applied to a genus of sharks, typified by *Squalus mustelus* L. by several authors (Linck, 1790; Leach, 1812; Fischer, 1813; and Cuvier, 1817). This Linnaean species is however based on references to both the two European species of this group, now usually regarded as belonging to different genera or subgenera. These have been usually called *Mustelus laevis* Risso, the "smooth hound" and *Mustelus stellatus* Risso (*canis*), the "spotted hound." Those of the early writers who recognized these fishes failed to use the specific name *mustelus* for either, or else applied it to both.

Linck, the earliest writer to propose the name *Mustelus*, however, distinctly mentions *Mustelus laevis* as a synonym of *Squalus mustelus* L. and as his type, a fact which must fix the name *Mustelus mustelus* on the "Smooth Hound." The name thus replaces *Pleuracromylon* Gill. *Galeus* Rafinesque (as restricted by Jordan and Evermann, to *S. mustelus* L.) is also a synonym of *Mustelus*.

The genus containing the "Spotted Hound" should then stand as *Cynias* Gill, the type species standing as *Cynias canis* (Mitchill).

Valmont de Bomare, 1768, speaks of the "Spotted Hound" as "*Galeus asterias* aut *Mustelus stellaris;* chien de mer à taches rondes." But this binomial combination is merely a Latin translation of the French, certainly not intended as a scientific name.

Garman (*Plagiostomia,* 1913) rejects the name *Mustelus* altogether, because of its similarity to *Mustela.* But *Mustela* is a weasel and *Mustelus* a shark, a case parallel to that of *Pica* and *Picus.*

[Apstein, 1915a, 188: *Mustelus* Cuv., 1817, type *vulgaris* J. Müll. & Henle, 1841.]

Polynemus Linnaeus, 1758: type *Polynemus paradisaeus* L.

The first real restriction seems to be that of Günther, Cat. Fishes, II, 1860, 319. No type is specified, but the non-congeneric species, *P. quinquarius* L., is removed to form the genus *Pentanemus,* a name originally employed by Artedi, but changed to *Polynemus* by Gronow. As this species, *quinquarius,* was the only one known to Artedi or to Gronow, Dr. Gill, with numerous writers, ourselves included, has regarded it as the type of *Polynemus.* But common usage with the formal selection of *P. paradiseus* L. as type by the first reviser, Jordan & Gilbert, Synopsis Fishes, 1882, should prevail.

Sciaena Linnaeus, 1758: type *Sciaena umbra* L. = *Cheilodipterus aquila* Lacépède, as restricted by Cuvier, 1815.

Sciaena umbra of Linnaeus was a complex species made up of the later *Sciaena aquila* Lacépède and *Corvina nigra* (Bloch); *umbra* is the natural type of *Sciaena,* but its component parts are not congeneric. The two species were confused until Cuvier (Mém. du Museum, 1815, and later in the Règne Animal, Edition II, 1829) made clear the difference and definitely chose *aquila* as the type of *Sciaena.* Jordan & Evermann have adopted *Corvina nigra,* under the name of *Sciaena umbra,* as type of *Sciaena.* An argument can be made for either arrangement, but convenience is best served and probably justice also by accepting the name *umbra* for the species called *aquila* and recognizing this as type of *Sciaena.* The two species concerned should then stand as *Sciaena umbra* L. and *Corvina nigra* (Bloch). Bleeker has chosen as type *Sciaena cirrosa,* the species placed first as the type of *Umbrina* Cuvier, but this arrangement is not the first revision.

[Apstein, 1915a, 189: *Sciaena* L., 1758, type *aquila* Risso, 1826.]

Serranus Cuvier: type *Perca cabrilla* L.

In proposing the generic name *Serranus,* Cuvier speaks of the species of the genus as "*les serrans,*" "leur nom sur plusieurs côtes du Méditerranée." "La Méditerranée en produit beaucoup, dont les plus communes s'y confondent sous les noms vulgaires de *perche de mer,* de *serran,* etc., et sont fort remarquables par la vivacité de leurs couleurs surtout á l'époque de l'amour."

These *Serrans* thus designated are obviously the species still called by that name, *Serranus cabrilla* and *Serranus scriba* of authors. But Cuvier neglects to mention either by its scientific name. In a further paragraph he mentions in *Serranus,* another species "beaucoup plus grand," *Holocentrus gigas* Schneider, which is a species of *Epinephelus.* For this reason, Fowler (Proc. Acad. Nat. Sci. Phila. 1907, 266) has taken *gigas* as the type of *Serranus,* thus replacing *Epinephelus* of authors, which name he leaves to *Alphestes afer.* No other writer has taken this view of the case, and I recommend the approval of the current nomenclature, regarding *Perca cabrilla* L. as the genotype of *Serranus.*

[Apstein, 1915a, 189: *Serranus* Cuv., 1829, type *scriba* L., 1758.]

Stolephorus Lacépède, 1803: type *Stolephorus commersonianus* Lacépède.

Under the head of *Stolephorus*, Lacépède (Hist. Nat. Poiss. V. 381, 1803) mentions two species, the first the *Atherina japonica* of Houttuyn, the second his own *S. commersonianus*. From the latter he derives his description, and on the latter Bleeker bases the genus *Stolephorus* as largely accepted. The *Atherina japonica* is very briefly and incorrectly described by Houttuyn, and it has been taken for granted that it was congeneric with the other, and being the first species named, it was indicated as type of the genus by Jordan & Evermann in 1896. It is probable, however, that Houttuyn had in mind the species of another family, named by Bleeker, *Spratelloides argyrotaenia*. In 1917 (Genera of Fishes, 67) the present writer gave reasons for retaining *A. japonica* as type of *Stolephorus*, thus replacing *Spratelloides* Bleeker, while *Stolephorus* of Bleeker and authors generally would stand as *Anchoviella* Fowler. But it would make far less confusion as well as secure substantial justice to retain *Stolephorus* for the large group of which *S. commersonianus* is typical.

Teuthis Linnaeus, 1766: type *Teuthis javus* L.

In the twelfth edition of the Systema Naturae, Linnaeus introduces the genus *Teuthis*, with two species, *Teuthis hepatus* and *Teuthis javus*. These species under polynomial names constitute the genus *Hepatus*, of the non-binomial Zoophylaceum of Gronow, 1763. The name *Teuthis* was taken from Browne (Jamaica), 1756, a pre-Linnaean writer, whose type was congeneric with that of Forskål's *Acanthurus*.

The two Linnaean species of *Teuthis* are but distantly related, a fact recognized by various subsequent writers. In 1775, the relatives of *hepatus* were set off by Forskål as *Acanthurus*, those of *javus* as *Siganus*. Cuvier used *Teuthyes* as a group name covering both types, the one being called *Acanthurus*, the other, after Bloch and Schneider, 1801, *Amphacanthus*.

The first author after Linnaeus to use *Teuthis* as a generic name was Cantor, 1849. It here replaces *Siganus*, with a correct definition and the Linnaean species *Teuthis javus*, placed at the head of the series.

In this usage, Günther and all European writers have followed, and although the word "type" is not mentioned by Cantor, the arrangement will bear rigorous interpretation.

Later Gill showed reasons why *Teuthis hepatus* should have been taken as type, *Teuthis* being a re-naming of *Hepatus* of Gronow, by reverting to the still earlier name of Browne. There is room for argument on both sides, but inasmuch as the first reviser (Cantor) selected *Teuthis javus* as type of *Teuthis* and current nomenclature outside of America uses *Acanthurus* for *hepatus* and its relatives and *Teuthis* instead of *Siganus*, I recommend that this course be approved by the Commission. In my own papers I have lately followed the suggestion of Dr. Gill, replacing the familiar *Acanthurus* by *Teuthis* or by *Hepatus*, reviving *Siganus* for the *javus* group. I am inclined to think this change unnecessary as it was certainly confusing, and that to follow Cantor is in better accord with established rules.

Opinion prepared by Commissioner David Starr Jordan.

Report on final vote: Two names *Aëtobatus* and *Lampetra* have been tabled without prejudice pending further discussion at the next

meeting of the Commission. The other 12 names are unanimously adopted by a vote of 13 to 0.

Opinion concurred in by thirteen (13) Commissioners: Apstein, Bather, Handlirsch, Hartert, Horvath, Jordan, D. S., Jordan, K., Loennberg, Monticelli, Neveu-Lemaire, Skinner, Stiles, and Warren.

Opinion dissented from by no Commissioner.

Not voting, four (4) Commissioners: Dabbene, Hoyle, Kolbe, and Stejneger.